

CLAIMS:

USA

1. A process of rendering a material suitable for storage comprising spraying into a hot gas stream an aqueous mixture 5 of the said material and a carrier substance which is water-soluble or water-swellable, thereby drying the mixture to particles which contain the material and the carrier substance and in which the said carrier substance is in a glassy or rubbery state, and separating the particles from 10 the gas stream.

2. A process according to claim 1 wherein the carrier substance, when on its own, is able to exist in a glassy amorphous state with a glass transition temperature above 15 20°C.

3. A process according to claim 1 wherein the composition produced by the drying procedure displays a glass transition temperature of at least 20°C.

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4. A process according to claim 1 wherein the composition produced by the drying procedure displays a glass transition temperature of at least 50°C.

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5. A process according to claim 1 wherein the carrier substance forms at least 20% by weight of the particles formed by drying.

6. A process according to claim 1 wherein the composition produced by the drying procedure displays a glass transition temperature of at least 50°C.

5 7. A process according to claim 1 wherein the material which is rendered suitable for storage is selected from proteins, peptides, nucleosides, nucleotides, dinucleotides, oligonucleotides and enzyme cofactors.

10 8. A process according to claim 1 wherein the material to be stored comprises viable biological cells.

9. A process according to claim 8 wherein the aqueous mixture sprayed into the gas stream comprises a suspension 15 of the cells in growth medium for the cells.

10. A process according to claim 1 wherein the carrier substance is a polyhydroxy compound.

20 11. A process according to claim 10 wherein the carrier substance is a carbohydrate.

12. A process according to claim 1 wherein the carrier substance is protein or a protein hydrolysis product.

25 13. A process according to claim 1 wherein the carrier substance is a sugar polymer containing sugar residues linked through ether bridges to bifunctional groups other

than carbohydrate.

14. A storable composition produced by the process of claim 1.